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DEPARTMENT OF COMMERCE
U.S. BUREAU OF THE CENSUS
SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES
1914

TURPENTINE AND ROSIN

Prepared under the supervision of W. M. STEUART, Chief Statistician for Manufactures

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EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention should be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or whose products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1914, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city or state in which it was located.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1914 and 1909 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the industry distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners. In the reports for the censuses of 1904 and 1899 these five classes were shown according to the three main groups: (1) Proprietors and firm members, (2) salaried officials, clerks, etc., and (3) wage earners. In comparative tables covering the census of 1904 it is of course necessary to group the figures according to the classification that was employed at the earlier censuses.

The number of persons engaged in the industry, distributed by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most establishments normal conditions of employment, but where this date was not a representative day an earlier date was chosen.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, without distinction of sex or age. From these figures tho average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The average thus obtained approximates the number of wage earners that would be required to perform the work done if all were constantly employed during the entire year. Accordingly, the importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

In order to determine as nearly as possible the sex and age distribution of the average number of wage earners for the industry as a whole, the per cent distribution by sex and age of the wage earners reported for December 15, or the nearest representative day, has been calculated from the actual number reported for that date, the percentages thus obtained have been applied to the average number of wage earners for the year in the industry to determine the average number of men, women, and children employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month and represent the approximate number who would be required to perform the work if all were continuously employed during the year, whereas the actual number to whom the total wages were paid would be larger.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a limited number of wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, all or practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital.—The instructions on the schedule for securing data relating to capital were as follows:

> The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises.

These instructions were identical with those employed at the census of 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating very general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include internal revenue, corporation income tax, and state, county, and local taxes. In some instances the amount of the corporation tax for 1914 had not been ascertained when the report was prepared and the amount paid for 1913 was given.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of interest or depreciation, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power generated by the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use, since in most cases an engine or motor is not required to deliver continuously its full rated horsepower.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, oil, and gas. They relate to the quantity used during the year, which may be more or less than the quantity purchased. As only the principal varieties of fuel are shown, no comparison can be made with the total cost of all fuel.

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TURPENTINE AND ROSIN.

By John B. Hopkins.

GENERAL STATISTICS.

Summary for the industry.—The statistics for the turpentine and rosin industry, as given in this report, cover the operations of establishments engaged in the distillation of oil or spirits of turpentine from the semifluid exudation of the pine tree, the crude material, designated as "dip" (the free-flowing sap) or "scrape" (the gum scraped from the cuts in the trees), being derived from the long-leaf pine (*Pinus palustris*), which is indigenous to the coastal area extending from North Carolina to eastern Texas, and to a less extent from the Cuban or slash pine (*Pinus heterophylla*) and the loblolly pine (*Pinus taeda*). A small amount of spirits of turpentine is obtained from pine wood by destructive distillation or by the steam process. The establishments, 14 in number, which produce turpentine in this manner are treated as belonging to the wood-distillation industry, and the statistics therefor are not herein included except in connection with the presentation of data for total production.

Comparison with earlier censuses.—Table 1 summarizes the more important data relative to the industry for the censuses of 1914, 1909, 1904, and 1899, and gives percentages of increase from census to census.

Table 1

	NUMBER OR AMOUNT.				PER CENT OF INCREASE.[1]		
	1914	1909	1904	1899	1909–1914	1904–1909	1899–1904
Number of establishments	1,394	1,585	1,287	1,503	−12.1	23.2	−14.4
Persons engaged	38,294	44,524	37,526	45,945	−14.0	18.6	−18.3
Proprietors and firm members	1,621	2,567	1,997	2,192	−36.9	28.5	−8.9
Salaried employees	1,856	2,446	2,147	1,889	−24.1	13.9	13.7
Wage earners (average number)	34,817	39,511	33,382	41,864	−11.9	18.4	−20.3
Primary horsepower	2,478	4,129	1,175	866	−40.0	251.4	35.7
Capital	$20,744,872	$12,400,978	$6,961,185	$11,847,495	67.3	78.1	−41.2
Salaries and wages	$10,017,385	$11,018,750	$9,534,922	$9,172,177	−9.1	15.6	4.0
Salaries	$1,434,415	$1,655,391	$1,152,222	$778,694	−13.3	43.7	48.0
Wages	$8,582,970	$9,363,359	$8,382,700	$8,393,483	−8.3	11.7	−0.1
Paid for contract work	$532,143	$658,006	$51,843	$160,309	−19.1	1,169.2	−67.7
Rent and taxes (including internal revenue)	$192,027	$193,617	[2] $62,502	[2] $99,632	−0.8	.....	.....
Cost of materials	$5,535,561	$4,910,838	$3,774,637	$6,186,492	12.7	30.1	−39.0
Value of products	$20,990,191	$25,295,017	$23,937,024	$20,344,888	−17.0	5.7	17.7
Value added by manufacture (value of products less cost of materials)	$15,454,630	$20,384,179	$20,162,387	$14,158,396	−24.2	1.1	42.4
Quantity of principal products:							
Spirits of turpentine (gallons)	26,980,981	28,988,954	30,687,051	37,733,500	−6.9	−5.5	−18.7
Rosin (barrels of 280 pounds gross)	2,885,077	3,263,857	3,508,347	4,348,094	−11.6	−7.0	−19.3

[1] A minus sign (−) denotes decrease.

[2] Exclusive of internal revenue.

The primitive method of charring wood under sod in kilns or pits to extract tar and pitch was employed by the earlier settlers of the eastern coast of Virginia and the Carolinas. Because the use of tar and pitch at this period was practically restricted to shipbuilding they were called "naval stores" by which term they, as well as spirits of turpentine and rosin, are still known.

Spirits of turpentine and rosin are now used chiefly as ingredients in such commodities as paint, oil, varnish, soap, paper, rubber, oilcloth, linoleum, sealing wax, fly paper, ink, lubricating compounds, and medicinal preparations. In recent years tar and pitch have come to be of little importance, owing mainly to the diminished demand for them since the general displacement of wooden by iron and steel ships.

The relatively small proportion—26.4 per cent in 1914—which the cost of materials, as shown in the table, forms of the value of products in this industry is due to the fact that the greater part of the cost of the material is the compensation of the employees engaged in gathering the crude gum and is reported under the head of "wages." In most cases it is quite impossible to distinguish the cost of labor and other expenses connected with the gathering of the gum from those pertaining to the distillation process.

The decrease of 12.1 per cent in the number of establishments during the five-year period 1909–1914 may be attributed to two causes: First, the diminution in the supply of longleaf pine in turpentine-producing states; and second, the tendency of manufacturing to concentrate in large establishments.

The increase of 67.3 per cent in the capital invested may be ascribed to various causes, viz, the development of new territory; the installation of the more expensive "cup system" of gathering the gum, in place of the less efficient "box system"; an advance in prices paid for turpentine rights; and also, in some instances, the seeming inability of the operators to segregate the value of the land from the value of the turpentine privileges.

The decrease of 17 per cent in value of products between 1909 and 1914 was due in part to diminished production and in part to a decrease in unit values.

During the period 1909–1914 the production of spirits of turpentine declined by more than 2,000,000 gallons, or 6.9 per cent, and that of rosin by 378,780 barrels, or 11.6 per cent; and this decrease in output was accompanied by a drop in the average price of the former product from 43.65 cents to 38.95 cents per gallon and in the average price of the latter from $3.85 to $3.58 per barrel.

Summary, by states.—Table 2 summarizes the more important statistics of the industry by states, the states being arranged according to the value of products reported for 1914.

Table 2

STATE.	CENSUS OF 1914. Number of establishments.	Wage earners. Average number.	Wage earners. Per cent distribution.	Wage earners. Rank. 1914	Wage earners. Rank. 1909	Value of products. Amount.	Value of products. Per cent distribution.	Value of products. Rank. 1914	Value of products. Rank. 1909	Value added by manufacture. Amount.	Value added by manufacture. Per cent distribution.	Value added by manufacture. Rank. 1914	Value added by manufacture. Rank. 1909
United States	1,394	34,817	100.0	....	....	$20,990,191	100.0	....	....	$15,454,630	100.0	....	....
Florida	508	15,466	44.4	1	1	9,573,083	45.6	1	1	6,989,518	45.2	1	1
Georgia	562	9,118	26.2	2	2	4,607,590	22.0	2	2	3,434,960	22.2	2	2
Alabama	160	3,411	9.8	3	3	2,047,132	9.8	3	3	1,525,946	9.9	3	3
Mississippi	61	3,275	9.4	4	4	1,997,139	9.5	4	4	1,416,960	9.2	5	4
Louisiana	27	2,472	7.1	5	5	1,858,391	8.8	5	5	1,434,041	9.3	4	5
Texas	6	809	2.3	6	7	608,374	2.9	6	8	510,098	3.3	6	8
South Carolina	35	221	0.6	7	6	151,801	0.7	7	7	94,700	0.6	7	6
North Carolina	35	45	0.1	8	8	146,681	0.7	8	6	48,407	0.3	8	7

STATE.	PER CENT OF INCREASE.[1] Wage earners (average number). 1909–1914	1904–1909	1899–1904	Value of products. 1909–1914	1904–1909	1899–1904	Value added by manufacture. 1909–1914	1904–1909	1899–1904
United States	−11.9	18.4	−20.3	−17.0	5.7	17.7	−24.2	1.1	42.4
Florida	−14.8	16.7	3.1	−19.8	20.6	53.0	−29.9	8.6	74.9
Georgia	−28.7	9.0	−38.9	−33.6	−10.0	−5.0	−39.5	−13.3	12.6
Alabama	−3.1	20.6	−21.4	−17.2	1.6	19.7	−23.2	3.3	39.0
Mississippi	27.3	−2.3	15.1	35.4	−37.7	33.5	25.9	−42.9	83.4
Louisiana	46.4	615.3	−21.9	58.3	453.8	84.3	41.3	480.6	113.4
Texas	269.4	.....	.....	179.3	.....	.....	189.9	.....	.....
South Carolina	−50.1	162.1	−80.9	−62.6	−29.3	−27.2	−60.9	21.0	−36.9
North Carolina	−67.6	−6.1	−63.0	−78.2	−9.3	−29.6	−74.7	15.8	−30.7

[1] Percentages are based on figures in Table 14; a minus sign (−) denotes decrease.

In 1849 the industry was largely confined to the eastern part of North Carolina, which continued to be the leading state until 1879, when it was outranked by South Carolina. In 1889 and 1899 Georgia led in value of products, but at the last three censuses Florida has ranked first and Georgia second, while North Carolina in 1914 ranked eighth, producing less than 1 per cent of the total in value of products.

The value added by manufacture forms a much larger proportion of the value of products in this than in most industries, as the greater part of the cost of the raw material is reported as wages.

Persons engaged in the industry.—Table 3 shows, for 1914 and 1909, the number of persons engaged in the industry, distributed by sex, the average number of wage earners being distributed also by age. The sex and age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the "Explanation of terms." Table 4 gives, for the several classes of persons engaged in the industry, the percentages of increase from 1909 to 1914, and the per cent distribution at the two censuses.

Table 3

CLASS.	Census year.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Male.	Female.	Per cent of total. Male.	Female.
All classes	1914	38,294	38,198	96	99.7	0.3
	1909	44,524	44,426	98	99.8	0.2
Proprietors and officials	1914	2,926	2,906	20	99.3	0.7
	1909	3,713	3,683	30	99.2	0.8
Proprietors and firm members	1914	1,621	1,601	20	98.8	1.2
	1909	2,567	2,537	30	98.8	1.2
Salaried officers of corporations	1914	117	117	.....	100.0	.....
	1909	86	86	.....	100.0	.....
Superintendents and managers	1914	1,188	1,188	.....	100.0	.....
	1909	1,060	1,060	.....	100.0	.....
Clerks and other subordinate salaried employees.	1914	551	543	8	98.5	1.5
	1909	1,300	1,296	4	99.7	0.3
Wage earners (average number)	1914	34,817	34,749	68	99.8	0.2
	1909	39,511	39,447	64	99.8	0.2
16 years of age and over	1914	34,358	34,293	65	99.8	0.2
	1909	38,918	38,861	57	99.9	0.1
Under 16 years of age	1914	459	456	3	99.3	0.7
	1909	593	586	7	98.8	1.2

Table 4

CLASS.	PERSONS ENGAGED IN THE INDUSTRY. Per cent of increase,[1] 1909–1914. Total.	Male.	Female.	Per cent distribution. Total. 1914	Total. 1909	Male. 1914	Male. 1909	Female. 1914	Female. 1909
All classes	−14.0	−14.0	.....	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	−21.2	−21.1	.....	7.6	8.3	7.6	8.3	20.8	30.6
Proprietors and firm members	−36.9	−36.9	.....	4.2	5.8	4.2	5.7	20.8	30.6
Salaried officers of corporations	.....	.....	.....	0.3	0.2	0.3	0.2	.....	.....
Superintendents and managers	12.1	12.1	.....	3.1	2.4	3.1	2.4	.....	.....
Clerks and other subordinate salaried employees	−57.6	−58.1	.....	1.4	2.9	1.4	2.9	8.3	4.1
Wage earners (average number)	−11.9	−11.9	.....	90.9	88.7	91.0	88.8	70.8	65.3
16 years of age and over	−11.7	−11.8	.....	89.7	87.4	89.8	87.5	67.7	58.2
Under 16 years of age	−22.6	−22.2	.....	1.2	1.3	1.2	1.3	3.1	7.1

[1] A minus sign (−) denotes decrease; percentages are omitted where base is less than 100.

In 1914, of the total number of persons engaged in the industry, 90.9 per cent were wage earners, 7.6 per cent were proprietors and officials, and 1.4 per cent were clerks and other subordinate salaried employees. Only 96 females were engaged in the industry and of these 20 were proprietors and firm members. There were 459 wage earners under 16 years of age, or 1.2 per cent of the total.

The only classes which show increases for the five-year period are salaried officers of corporations and superintendents and managers. The employment of child labor shows a marked decline, the decrease in wage earners under 16 being relatively nearly twice as great as that in wage earners 16 years of age and over.

Wage earners employed, by months.—The following table gives for the industry the total number of wage earners employed on the 15th of each month, or the nearest representative day, for 1914 and 1909, and the average number employed each month in 1904, together with the percentage which the number reported for each month forms of the maximum number reported for any month.

Table 5

MONTH.	WAGE EARNERS IN THE INDUSTRY.					
	Number.[1]			Per cent of maximum.		
	1914	1909	1904	1914	1909	1.04
January	33,717	37,112	27,515	89.3	91.3	72.9
February	33,981	37,310	28,084	90.0	91.9	71.4
March	35,759	39,489	33,266	94.7	97.2	88.1
April	37,408	39,974	35,955	99.0	98.4	95.2
May	37,767	40,378	37,115	100.0	99.1	99.1
June	37,647	40,555	37,761	99.7	99.8	100.0
July	37,579	40,631	36,799	99.5	100.0	97.5
August	35,747	40,583	35,401	94.7	99.9	93.8
September	34,031	40,378	34,566	90.1	99.1	91.5
October	32,608	39,749	33,544	86.3	97.8	88.8
November	31,150	39,597	32,196	82.5	97.1	85.3
December	30,407	39,313	28,082	80.5	96.8	74.4

[1] The figures for 1914 and 1909 represent the number employed on the 15th of each month, or the nearest representative day; those for 1904, the average number employed during the month.

Table 6 gives the total average number of wage earners employed during 1914, together with the total number employed on the 15th of each month, or the nearest representative day, for the United States as a whole and for each of the eight states.

Table 6

WAGE EARNERS: 1914.
[Month of maximum employment for each state is indicated by **boldface** figures and that of minimum by *italic* figures.]

STATE.	Average number employed during year.	Number employed on 15th day of the month or nearest representative day.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States	34,817	33,717	33,984	35,759	37,408	**37,767**	37,647	37,579	35,747	34,031	32,608	31,150	*30,407*	80.5
Alabama	3,411	2,979	3,003	3,501	3,751	3,773	3,798	**3,815**	3,658	3,543	3,314	2,998	*2,799*	73.4
Florida	15,466	15,412	15,502	16,102	16,651	16,926	**16,988**	16,726	15,741	14,523	14,178	13,554	*13,289*	78.2
Georgia	9,118	8,625	8,814	9,345	10,015	**10,116**	9,884	10,032	9,322	9,070	8,424	8,055	*7,714*	76.3
Louisiana	2,472	2,512	2,511	2,506	**2,571**	2,454	2,445	2,446	2,488	2,450	*2,401*	2,402	2,478	93.4
Mississippi	3,275	*3,165*	3,189	3,246	3,302	3,312	3,362	3,372	3,351	3,310	3,275	3,216	3,200	93.9
North Carolina	45	27	*26*	*26*	44	**65**	**65**	**65**	63	63	34	32	30	40.0
South Carolina	221	135	145	230	283	**303**	279	275	262	244	226	162	*108*	35.6
Texas	809	**862**	794	803	791	818	826	848	**862**	828	756	*731*	789	84.8

The work done by wage earners in the turpentine and rosin industry is distributed as follows: Cutting boxes and hanging cups during the winter months, chipping and dipping in the spring and summer, and scraping and raking in the fall. The greatest number of wage earners are employed during the chipping and dipping season, a somewhat augmented force being required at that time to transport the gum, operate the distilleries, and handle the products. Taking the industry as a whole, the largest number employed during any month of 1914 was 37,767, in May, and the smallest was 30,407, in December, the minimum forming 80.5 per cent of the maximum. The variation was thus considerably greater than in 1909, when the minimum number represented 91.3 per cent of the maximum, but was materially less than in 1904, for which year the corresponding percentage was only 72.9.

Among the states having over 2,000 wage earners, the greatest fluctuation in 1914 is shown for Alabama, in which the minimum month represented only 73.4 per cent of the maximum, and the smallest for Mississippi, in which the corresponding percentage was 93.9.

Prevailing hours of labor.—In Table 7 the average number of wage earners reported for 1914 and 1909, for the industry, have been classified according to the number of hours of labor per week prevailing in the establishment in which they were employed. In this industry, however, in which the piecework system of wage payments is in very general use and the woodsmen usually work irregular hours, a classification on this basis is of doubtful significance.

The figures in this table for the entire industry indicate a tendency toward a shortening of the working day of the wage earner. In 1914, 16,859 or 48.4 per cent of the wage earners were employed in establishments where 60 hours or more per week were the prevailing hours of labor as compared with 20,776, or 52.6 per cent in 1909. The largest number of wage earners in Alabama, Louisiana, Mississippi, and South Carolina were employed in establishments where the prevailing hours of labor were 48 hours or less per week, while for the industry as a whole, and for the 4 remaining states, the prevailing hours were 60 per week.

Table 7

STATE.	Census year.	WAGE EARNERS. Total.	Average number in establishments where the prevailing hours of labor per week were— 48 and under.	Between 48 and 54.	54	Between 54 and 60.	60	Between 60 and 72.	72	Over 72.
United States	1914	34,817	13,680	2,770	728	780	15,995	713	151	.....
	1909	39,511	14,786	2,647	1,022	280	19,607	997	172	.....
Alabama	1914	3,411	2,027	144	152	40	919	82	47	.....
	1909	3,519	1,243	187	248	24	1,393	359	65	.....
Florida	1914	15,466	5,883	1,155	476	255	7,294	387	16	.....
	1909	18,143	8,344	1,983	635	147	6,859	149	26	.....
Georgia	1914	9,118	2,953	868	90	419	4,700	.....	88	.....
	1909	12,787	2,764	428	139	109	9,032	241	74	.....
Louisiana	1914	2,472	1,187	170	.....	.....	948	167	.....	.....
	1909	1,688	262	.....	.....	.....	1,277	149	.....	.....
Mississippi	1914	3,275	1,494	405	9	50	1,240	77	.....	.....
	1909	2,573	1,830	24	.....	.....	621	98	.....	.....
North Carolina	1914	45	9	8	1	.....	27	.....	.....	.....
	1909	139	69	2	.....	.....	60	1	7	.....
South Carolina	1914	221	127	20	.....	16	58	.....	.....	.....
	1909	443	174	23	.....	.....	246	.....	.....	.....
Texas	1914	809	.....	.....	.....	.....	809	.....	.....	.....
	1909	219	100	.....	.....	.....	119	.....	.....	.....

Character of ownership.—Table 8 presents statistics concerning the character of ownership, or legal organization, of establishments in the industry, for 1914 and 1909, and for 1914 for the eight states.

Table 8

STATE.	NUMBER OF ESTABLISHMENTS OWNED BY— Individuals.	Corporations.	All others.	AVERAGE NUMBER OF WAGE EARNERS. Total.	In establishments owned by— Individuals.	Corporations.	All others.	Per cent of total. Individuals.	Corporations.	All others.	VALUE OF PRODUCTS. Total.	Of establishments owned by— Individuals.	Corporations.	All others.	Per cent of total. Individuals.	Corporations.	All others.
United States:																	
1914	552	221	621	34,817	8,571	12,812	13,434	24.6	37.0	38.4	$20,990,191	$4,731,386	$8,402,036	$7,856,769	22.5	40.3	37.2
1909	599	196	790	39,511	11,022	9,130	19,359	27.9	23.1	49.0	25,295,017	6,966,127	6,144,056	12,184,834	27.5	24.3	48.1
Alabama	74	24	62	3,411	1,175	881	1,355	34.4	25.8	39.7	2,047,132	642,881	546,710	857,541	31.4	26.7	41.9
Florida	153	100	255	15,466	3,425	5,292	6,749	22.1	34.2	43.6	9,573,083	1,961,374	3,588,009	4,023,700	20.5	37.5	42.0
Georgia	254	42	266	9,118	3,449	835	4,834	37.8	9.2	53.0	4,607,590	1,694,126	447,636	2,465,828	36.8	9.7	53.5
Louisiana	4	17	6	2,472	80	2,293	99	3.2	92.8	4.0	1,858,391	66,099	1,709,584	82,708	3.6	92.0	4.4
Mississippi	16	30	15	3,275	233	2,770	272	7.1	84.6	8.3	1,997,139	155,842	1,552,057	289,240	7.8	77.7	14.5
North Carolina	25	2	8	45	29	.....	[1] 16	64.4	.....	[1] 35.6	146,681	107,934	.....	[1] 38,747	73.6	.....	[1] 26.4
South Carolina	26	2	7	221	180	.....	[1] 41	81.4	.....	[1] 18.6	151,801	103,130	.....	[1] 48,671	67.9	.....	[1] 32.1
Texas	.....	4	2	809	.....	[2] 809	.....	.....	[2] 100.0	.....	608,374	.....	[2] 608,374	.....	.....	[2] 100.00	.....

[1] Includes "corporations."

[2] Includes "all others."

In 1914 the greatest proportion of the establishments and of the number of wage earners employed—44.7 and 38.4 per cent, respectively—are shown for those under "all other" ownership, which is composed of limited partnerships and firms; but for value of products those owned by corporations predominate. In 1909, establishments operated by firms predominated in all three items, forming 49.8 per cent, 49 per cent, and 48.1 per cent, respectively, of the totals. For the states, individual ownership predominated in the Carolinas in all items; corporations in Louisiana, Mississippi, and Texas; and "all other" or firms in Alabama, Florida, and Georgia.

Size of establishments.—The tendency of the industry to become concentrated in large establishments, or the reverse, is indicated by the statistics given in Table 9.

Of the 20 establishments which for 1914 reported products valued at more than $100,000 each, 1 was located in Alabama, 7 in Florida, 7 in Louisiana, 4 in Mississippi, and 1 in Texas. The greatest output was reported by the plant in Texas.

Table 9

VALUE OF PRODUCT.	Census year.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
All classes	1914	1,394	34,817	$20,990,191	$15,454,630
	1909	1,585	39,511	25,295,017	20,384,179
Less than $5,000	1914	357	2,370	1,076,043	730,684
	1909	249	1,409	775,812	530,619
$5,000 to $20,000	1914	800	15,987	8,494,419	6,152,268
	1909	971	19,261	11,216,577	8,933,708
$20,000 to $100,000	1914	217	11,232	7,888,112	5,933,919
	1909	355	16,412	11,618,484	9,594,332
$100,000 to $1,000,000	1914	20	5,228	3,531,617	2,637,759
	1909	10	2,429	1,684,144	1,325,520
Per cent distribution:					
Less than $5,000	1914	25.6	6.8	5.1	4.7
	1909	15.7	3.6	3.1	2.6
$5,000 to $20,000	1914	57.4	45.9	40.5	39.8
	1909	61.3	48.7	44.3	43.8
$20,000 to $100,000	1914	15.6	32.3	37.6	38.4
	1909	22.4	41.5	45.9	47.1
$100,000 to $1,000,000	1914	1.4	15.0	16.8	17.1
	1909	0.6	6.1	6.7	6.5

It is noteworthy that both this group of large establishments and the group comprising the smallest

ones—those having products valued at less than $5,000—show marked increases for the period 1909–1914 in number of establishments, average number of wage earners, value of products, and value added by manufacture, while decreases in all these respects appear for the other two groups and for the entire industry.

Table 10 shows the size of establishments in 1914 and 1909, as measured by number of wage earners employed for the industry as a whole, and for the eight states.

Table 10

STATE.	Census year.	TOTAL.		ESTABLISHMENTS EMPLOYING—													
				No wage earners.	1 to 5 wage earners.		6 to 20 wage earners.		21 to 50 wage earners.		51 to 100 wage earners.		101 to 250 wage earners.		251 to 500 wage earners.		501 to 1,000 wage earners.	
		Establishments.	Wage earners (average number).	Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
United States	1914	1,394	34,817	21	218	629	631	8,569	419	13,499	77	5,561	20	3,263	7	2,557	1	739
	1909	1,585	39,511	19	194	468	655	9,430	603	19,245	88	5,673	23	3,487	2	553	1	655
Alabama	1914	160	3,411	4	33	101	57	771	59	1,964	7	576	.....	.....	.....	.....	.....	.....
	1909	175	3,519	2	29	92	81	1,147	57	1,824	5	306	1	150	.....	.....	.....	.....
Florida	1914	508	15,466	1	32	119	203	2,885	214	7,025	48	3,448	8	1,313	2	676	.....	.....
	1909	593	18,143	10	18	67	198	3,047	298	9,644	57	3,603	12	1,782	.....	.....	.....	.....
Georgia	1914	562	9,118	6	83	265	344	4,580	118	3,481	11	792	.....	.....	.....	.....	.....	.....
	1909	592	12,787	2	35	134	319	4,515	214	6,620	21	1,414	1	104	.....	.....	.....	.....
Louisiana	1914	27	2,472	.....	2	5	4	46	8	222	4	298	7	1,176	2	731	.....	.....
	1909	23	1,688	.....	.....	.....	7	108	9	371	1	86	5	823	1	300	.....	.....
Mississippi	1914	61	3,275	2	21	59	9	138	16	647	7	454	3	488	2	750	1	739
	1909	64	2,573	2	9	13	27	375	18	591	3	164	3	522	1	253	1	655
North Carolina	1914	35	45	6	28	39	1	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1909	79	139	.....	76	112	3	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Carolina	1914	35	221	2	19	41	13	143	1	37	.....	.....	.....	.....	.....	.....	.....	.....
	1909	56	443	3	27	50	19	198	7	195	.....	.....	.....	.....	.....	.....	.....	.....
Texas	1914	6	809	.....	.....	.....	.....	.....	3	123	.....	.....	2	286	1	400	.....	.....
	1909	3	219	.....	.....	.....	1	13	.....	.....	1	100	1	106	.....	.....	.....	.....

There were 21 establishments for which no wage earners were shown. These are small concerns where the work is done by the proprietors or firm members, or where the number employed was so small, and the time of employment so short that in computing the average, as described in the "Explanation of terms," the number was less than one person and the establishment was classed as having "no wage earners." The large establishments, those employing over 100 wage earners, formed 2 per cent of the total, but gave employment to 6,559, or 18.8 per cent of the total wage earners employed. A majority of the establishments (1,050, or 75.3 per cent) employed from 6 to 50 wage earners, and the wage earners in this group formed 63.4 per cent of the total number employed, compared with 72.6 per cent in 1909. In the individual states this is true also, with the exception of the Carolinas, where the greatest proportion of establishments employed from 1 to 5 wage earners.

Engines and power.—Table 11 shows, for 1914, 1909, and 1904, the number and horsepower of engines and motors employed in generating power.

Table 11

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	522	1,214	176	2,478	[1] 4,129	1,175	100.0	100.0	100.0
Owned	522	1,214	176	2,478	4,122	1,175	100.0	99.8	100.0
Steam engines and turbines	325	1,152	175	1,669	3,877	1,172	67.1	93.9	99.7
Internal-combustion engines	193	58	.....	789	231	.....	31.8	5.6	.....
Water wheels, turbines, and motors	4	4	1	20	14	3	0.8	0.3	0.3

[1] Includes seven horsepower of rented power other than electric.

Little mechanical power is required for this industry, many establishments reporting none. The total primary power increased by 2,954 horsepower, or more than 250 per cent, between 1904 and 1909, but decreased during the next five-year period by 1,651 horsepower, or 40 per cent. Practically all the power is derived from steam engines and turbines and internal-combustion engines, the horsepower of the latter representing nearly one-third of the total in 1914, as against less than 6 per cent in 1909.

Fuel.—The principal fuel used is wood, chiefly waste timber, the quantity of which was not reported. The only class of fuel reported was oil, of which 783 barrels were consumed. All the turpentine states except Texas and South Carolina reported this variety of fuel.

SPECIAL STATISTICS AS TO MATERIALS, PRODUCTS, AND CROPS.

Materials and products.—Table 12 presents, by states, for 1914 and 1909, statistics in regard to the quantity of materials consumed and the quantity and value of products.

Table 12

STATE.	Census year.	Number of establishments.	MATERIALS USED. Crude gum distilled. Dip (barrels).[2]	Crude gum distilled. Scrape (barrels).[2]	Dip and scrape purchased [3] (barrels).	PRODUCTS.[1] Total value.	Spirits of turpentine. Gallons.	Spirits of turpentine. Value.	Rosin. Barrels (280 pounds).	Rosin. Value.	Dross and all other products, value.
United States	1914	1,394	2,194,532	902,477	83,666	$20,990,191	26,980,981	$10,509,527	2,885,077	$10,329,410	$151,254
	1909	1,585	2,376,903	1,099,789	180,119	25,295,017	28,988,954	12,654,228	3,263,857	12,576,721	64,068
Alabama	1914	160	227,695	110,629	9,791	2,047,132	2,721,777	1,053,133	294,820	985,966	8,033
	1909	175	236,279	121,286	13,324	2,471,999	2,840,242	1,253,737	309,763	1,214,054	4,208
Florida	1914	508	975,535	427,484	6,937	9,573,083	12,363,232	4,820,679	1,310,307	4,695,561	56,843
	1909	593	1,112,195	513,924	2,614	11,937,518	13,809,785	5,847,478	1,555,749	6,057,524	32,516
Georgia	1914	562	512,360	178,761	12,717	4,607,590	6,228,041	2,489,145	621,306	2,068,218	50,227
	1909	592	656,736	295,225	13,608	6,938,957	8,056,752	3,556,965	904,103	3,371,676	10,316
Louisiana	1914	27	175,908	74,181	1,046	1,858,391	2,252,118	835,509	269,274	1,006,279	16,603
	1909	23	90,224	43,164	.....	1,173,848	1,231,254	592,641	139,486	573,306	7,901
Mississippi	1914	61	207,876	73,333	12,969	1,997,139	2,385,054	905,747	275,205	1,081,040	10,352
	1909	64	127,102	62,253	6,669	1,474,629	1,588,786	732,334	192,508	739,799	2,496
North Carolina	1914	35	24,964	10,037	27,945	146,681	182,378	70,843	23,641	70,804	5,034
	1909	79	101,188	36,237	122,631	673,954	781,197	369,587	83,070	304,232	135
South Carolina	1914	35	20,034	7,697	12,261	151,801	201,221	78,233	16,169	72,377	1,191
	1909	56	37,479	21,900	21,273	406,286	460,186	205,517	51,401	199,273	1,496
Texas	1914	6	50,160	20,355	.....	608,374	647,160	256,238	74,355	349,165	2,971
	1909	3	15,700	5,800	.....	217,826	220,752	95,969	27,777	116,857	5,000

[1] In addition, in 1914, 92,401 gallons of spirits of turpentine, valued at $36,617, and 8,027 barrels of rosin, valued at $44,734, were reported by establishments assigned to lumber and timber products, and 575,557 gallons of spirits of turpentine, valued at $194,183, and 51,825 barrels of rosin, valued at $198,165, were reported by establishments engaged in the distillation of wood. In 1909, 18,310 gallons of spirits of turpentine, valued at $7,482, were reported by lumber manufactures, and 706,868 gallons, valued at $249,526, by wood distillation.

[2] The barrel in 1914 has been reduced to an estimated weight of 500 pounds each for dip, and of 300 pounds for scrape. The weights reported ranged from 250 to 550 pounds and 180 to 500 pounds, respectively. In 1909, the weight per barrel ranged from 280 to 600 pounds for dip, and from 200 to 400 for scrape. All the establishments did not report the weight per barrel and no attempt was made to reduce them to a uniform weight.

[3] Included in the totals for crude gum distilled.

Including the production of turpentine and rosin by establishments assigned to the lumber and timber and the wood-distillation industries, the total output of these products in 1914 was valued at $21,463,890 and comprised 27,648,939 gallons of spirits of turpentine, valued at $10,740,327; 2,944,929 barrels of rosin, valued at $10,572,309; and dross and other products to the value of $151,254. The average values of the spirits of turpentine distilled from the gum were 39 cents per gallon in 1914, 44 cents in 1909, and 49 cents in 1904; the turpentine product of wood distillation shows somewhat lower averages, namely, 34 cents in 1914, 35 cents in 1909, and 40 cents in 1904.

The decrease in production for the five-year period 1909 to 1914 was shared by five of the eight turpentine-producing states, viz, Alabama, Florida, Georgia North Carolina, and South Carolina; while Louisiana, Mississippi, and Texas show marked gains. In Louisiana the increase amounted to 58.3 per cent in value of products, 82.9 per cent in quantity of spirits of turpentine, and 93 per cent in quantity of rosin; in Mississippi, to 35.4 per cent, 50.1 per cent, and 43 per cent, respectively, and in Texas, to 170.9 per cent, 193.2 per cent, and 167.7 per cent, respectively. Texas thus shows the largest percentage of gain; but the greatest amount of increase in value of products appears for Louisiana and the next greatest for Mississippi.

Equipment and methods of operation.—Two systems of extracting the gum from the trees are in use—the "box system" and the "cup system." The essential feature of the box system is a box or cavity, cut into the base of the tree by means of a long-bladed ax to receive the liquid gum, which is called "dip." This operation is followed by "chipping," which is the wounding or scarifying of the trunk of the tree directly above the box, a strip of bark and sapwood about three-fourths of an inch wide and from one-half to 1 inch deep being removed. The stroke with the "hach," a specially constructed tool for this use, is made from either side diagonally downward, terminating in the center and immediately above the box. An exposed surface the width of the box is thus created, which is termed a "face." A season's chipping extends the face of the tree upward a distance of about 24 inches. The dip is transferred from the box by the use of a flat, trowel-shaped instrument called a "dipper."

The cup system, now most generally used, differs from the box system principally in the substitution of a clay or metal cup for the cut-in box, the gum being conveyed into the cup by means of metal gutters inserted into the tree and leading diagonally downward. The chipping of the tree begins above the cup, and continues upward in the same manner as when the box system is used. After the chipping has extended up the tree for a distance, the cup and gutters may be raised, thus avoiding much waste by evaporation. Its chief advantage over the box system is that it causes less damage to the vitality and stability of the trees and secures a greater yield and a better quality of crude gum.

The gum which hardens on the tree is gathered by the use of a "scraper." Because of evaporation,

"scrape" produces less spirits and more rosin than dip. The methods of operations are more fully described in the reports for the census of 1909. (Thirteenth Census of the United States, 1910, Vol. 10, Manufactures, page 686.)

Timber which is undergoing its first period of working is termed "round timber." After it has been worked four or five years it is allowed to rest for a number of years—generally about four—during which time the wounds heal and its vitality is restored, so that it is in condition to furnish another yield of gum. Timber which, after such a rest, is again being worked, is called "back-boxed timber" (the expression, which refers to the cutting of new boxes, having originated when the box system was the only one employed).

The unit of measure in turpentine operations is the "crop," which consists of 10,500 boxes or cups.

Table 13 shows, by states, for 1914 and 1909, the total number and age of the crops worked, the system used in working them, and the number worked in "round" and in "back-boxed" timber, together with the per cent distribution, by systems, of the total number of crops.

Table 13

SYSTEM EMPLOYED AND NUMBER OF CROPS.	UNITED STATES.		ALABAMA.		FLORIDA.		GEORGIA.		LOUISIANA.		MISSISSIPPI.		NORTH CAROLINA.		SOUTH CAROLINA.		TEXAS.	
	1914	1909	1914	1909	1914	1909	1914	1909	1914	1909	1914	1909	1914	1909	1914	1909	1914	1909
Number of crops worked, total	18,166	20,158	1,693	1,945	8,950	9,923	5,044	6,178	943	633	1,138	1,053	39	62	125	271	234	93
By cup system	11,813	2,383	1,410	309	5,627	1,114	2,548	457	903	278	1,121	182	.....	2	16	.....	188	41
By box system	6,353	17,775	283	1,636	3,323	8,809	2,496	5,721	40	355	17	871	39	60	109	271	46	52
Per cent distribution:																		
By cup system	65.0	11.8	83.3	15.9	62.9	11.2	50.5	7.4	95.8	43.9	98.5	17.3	.....	3.2	12.8	.....	80.3	44.1
By box system	35.0	88.2	16.7	84.1	37.1	88.8	49.5	92.6	4.2	56.1	1.5	82.7	100.0	96.8	87.2	100.0	19.7	55.9
Virgin (first year), total	3,190	3,860	266	468	1,431	1,700	810	1,146	307	206	279	271	2	6	5	42	90	21
By cup system	2,369	802	250	131	1,025	326	444	120	301	116	275	90	.....	.....	.....	.....	74	19
By box system	821	3,058	16	337	406	1,374	366	1,026	6	90	4	181	2	6	5	42	16	2
Yearling (second year), total	4,666	4,327	460	504	1,978	1,906	1,327	1,283	347	212	402	301	.....	16	40	41	112	64
By cup system	3,287	661	408	84	1,348	313	706	101	339	99	398	49	.....	1	6	.....	82	14
By box system	1,379	3,666	52	420	630	1,593	621	1,182	8	113	4	252	.....	15	34	41	30	50
Third year, total	5,260	4,977	653	494	2,430	2,275	1,546	1,621	211	160	344	328	2	4	42	91	32	4
By cup system	3,625	528	556	71	1,696	210	796	139	199	63	337	40	.....	1	9	.....	32	4
By box system	1,635	4,449	97	423	734	2,065	750	1,482	12	97	7	288	2	3	33	91	.....	.....
Fourth year and older, total	5,050	6,994	314	479	3,111	4,042	1,361	2,128	78	55	113	153	35	36	38	97	.....	4
By cup system	2,532	392	196	23	1,558	265	602	97	64	.....	111	3	.....	.....	1	.....	.....	4
By box system	2,518	6,602	118	456	1,553	3,777	759	2,031	14	55	2	150	35	36	37	97	.....	.....
In round timber, total	9,852	13,363	1,100	1,667	5,747	8,435	995	1,461	743	617	934	995	15	19	84	76	234	93
By cup system	6,440	1,572	867	260	3,220	727	532	100	708	278	917	164	.....	2	8	.....	188	41
By box system	3,412	11,791	233	1,407	2,527	7,708	463	1,361	35	339	17	831	15	17	76	76	46	52
In back-boxed timber, total	8,314	6,795	593	278	3,203	1,488	4,049	4,717	200	16	204	58	24	43	41	195	.....	.....
By cup system	5,373	811	543	49	2,407	387	2,016	357	195	.....	204	18	.....	.....	8	.....	.....	.....
By box system	2,941	5,984	50	229	796	1,101	2,033	4,360	5	16	.....	40	24	43	33	195	.....	.....

The extent to which the cup system is supplanting the box system is strikingly brought out by the figures showing the per cent distribution for the two censuses. In 1909 only 11.8 per cent of the crops were worked by the cup system, but in 1914 the corresponding percentage had increased to 65. Among the states, the greatest proportions of the crops worked by this system in 1914 are shown in the returns from Mississippi and Louisiana, 98.5 per cent and 95.8 per cent, respectively.

GENERAL TABLES.

The principal statistics secured by the census inquiry concerning the turpentine and rosin industry are presented, by states, in Tables 14 and 15.

Table 14 shows, for 1914, 1909, and 1904, by states, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products as reported for the turpentine and rosin industry.

Table 15 presents, for 1914, by states, the more detailed statistics of the industry.

TABLE 14.—COMPARATIVE SUMMARY, BY STATES, FOR 1914, 1909, AND 1904.

STATE.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1914	1,394	34,817	2,478	$8,583	$5,535	$20,990
	1909	1,585	39,511	4,129	9,363	4,911	25,295
	1904	1,287	33,382	1,175	8,383	3,775	23,937
Alabama	1914	160	3,411	164	850	521	2,047
	1909	175	3,519	384	906	486	2,472
	1904	144	2,919	151	745	511	2,434
Florida	1914	508	15,466	913	4,015	2,584	9,573
	1909	593	18,143	1,916	4,316	1,969	11,937
	1904	406	15,541	349	3,714	725	9,902
Georgia	1914	562	9,118	1,158	2,101	1,173	4,608
	1909	592	12,787	1,407	2,931	1,260	6,939
	1904	432	11,736	362	3,041	1,156	7,706
Louisiana	1914	27	2,472	79	689	424	1,858
	1909	23	1,688	105	420	158	1,174
	1904	15	236	.....	70	37	212
Mississippi	1914	61	3,275	108	$669	$580	$1,997
	1909	64	2,573	286	581	349	1,475
	1904	124	2,633	300	737	394	2,366
North Carolina	1914	35	45	33	10	98	147
	1909	79	139	19	28	483	674
	1904	87	148	4	39	578	743
South Carolina	1914	35	221	2	42	57	152
	1909	56	443	2	101	164	406
	1904	79	169	9	37	374	574
Texas	1914	6	809	21	207	98	608
	1909	3	219	10	80	42	218
	1904	.....	.....	.....	.....	.....	.....

TABLE 15.—DETAIL STATISTICS FOR THE TURPENTINE AND ROSIN INDUSTRY, BY STATES: 1914.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.
		Total.	Proprietors, and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.	
								Maximum month. / Minimum month.						
United States	1,394	38,294	1,621	1,305	543	8	34,817	My 37,767 / De 30,407	36,504	35,955	68	478	3	$20,744,872
Alabama	160	3,760	214	99	34	2	3,411	Jy 3,815 / De 2,799	3,636	3,599	.....	37	.....	1,038,681
Florida	508	16,975	674	565	269	1	15,466	Jc 16,988 / De 13,289	15,883	15,542	47	291	3	9,894,866
Georgia	562	10,166	569	422	55	2	9,118	My 10,116 / De 7,714	9,998	9,933	1	64	.....	4,572,172
Louisiana	27	2,630	16	82	59	1	2,472	Ap 2,871 / Oc 2,401	2,537	2,522	.....	15	.....	2,280,190
Mississippi	61	3,506	51	90	89	1	3,275	Jy 3,372 / Ja 3,165	3,262	3,200	20	42	.....	2,273,186
North Carolina	35	96	47	2	1	1	45	My[1] 65 / Mh[1] 26	65	64	.....	1	.....	66,246
South Carolina	35	281	45	14	1	.....	221	My 303 / De 108	302	300	.....	2	.....	62,120
Texas	6	880	5	31	35	.....	809	Au[1] 862 / No 731	821	795	.....	26	.....	557,411

STATE.	EXPENSES.								Value of products.	Value added by manufacture.	POWER.			
	Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.			
	Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, including internal revenue and corporation income.	Principal materials.	Fuel and rent of power.			Total.	Steam engines.	Internal-combustion engines.	Water wheels and motors.
United States	$1,077,569	$356,846	$8,582,970	$532,143	$15,630	$176,397	$5,431,509	$104,052	$20,990,191	$15,454,630	2,478	1,669	789	20
Alabama	77,946	18,477	850,201	11,592	1,103	7,577	516,511	4,675	2,047,132	1,525,946	164	114	50	.....
Florida	476,594	170,115	4,014,790	372,708	1,814	96,606	2,535,948	47,617	9,573,083	6,989,518	913	588	325	.....
Georgia	275,344	33,568	2,101,320	40,094	6,933	36,874	1,142,356	30,274	4,607,590	3,434,960	1,158	775	363	20
Louisiana	99,337	50,568	688,426	42,626	1,035	13,576	418,852	5,498	1,858,391	1,434,041	79	62	17	.....
Mississippi	99,880	53,145	669,323	60,436	3,870	17,898	569,403	10,776	1,997,139	1,416,960	108	96	12	.....
North Carolina	1,120	1,680	10,202	3,573	220	530	96,989	1,285	146,681	48,407	33	13	20	.....
South Carolina	6,895	960	41,429	465	655	513	55,340	1,761	151,801	94,700	2	.....	2	.....
Texas	40,453	28,333	207,279	619	.....	2,823	96,110	2,166	608,374	510,098	21	21	.....	.....

[1] Same number reported for one or more other months.

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